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09/981,459	10/16/2001	Michael H. D'Amico	13251US01	5919

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EXAMINER

MCCULLOCH JR, WILLIAM H

ART UNIT	PAPER NUMBER
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3714

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/981,459	Applicant(s) D'AMICO ET AL.	
	Examiner William H. McCulloch	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,21,23 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,21,23 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to amendments received 1/30/2009. Claims 1-3, 5, 21, 23, and 34 are pending in the application, all of which claims are currently amended, with claim 36 cancelled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5, 21, 23, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,766,076 to Pease et al. (hereinafter Pease) in view of U.S. 6,682,421 to Rowe et al. (hereinafter Rowe) and "What are relational databases?".

Regarding claims 1, 21, and 34, Pease teaches a gaming system comprising a central authority (central computer system 106) and a plurality of gaming machines (e.g. gaming devices 108a-108c), wherein at least one of said plurality of gaming machines (i) comprises a meter configured to generate meter data (see at least 5:47-51), (ii) comprises a jackpot meter configured to generate jackpot data (see at least 5:56-60), (iii) is responsive to player cards having associated player identification numbers (see at least 3:37-4:9), apparatus for providing data storage and communications between the gaming machines and the central authority comprising:

- A first database located in the central authority and arranged to store (i) input data to be sent to one or more of the plurality of gaming machines to keep

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- said one or more gaming machines operational (see at least 3:61-4:9) and (ii) output data generated by the plurality of gaming machines (see at least 3:37-4:9 and 5:47-60),
- Wherein the input data comprises one or more credit balances corresponding to one or more player identification numbers (see at least 3:61-4:9, and
 - Wherein the output data comprises meter data, jackpot data, and player data (see at least 3:37-4:9 and 5:47-60);
 - A network (see at least Fig. 1 and description thereof); and
 - A data processing unit (e.g., gateway processor 138) spaced apart from the first database and comprising:
 - A second database (e.g., data stored in the gateway processor 138); and
 - A programmed hardware (e.g., the gateway processor hardware) configured:
 - (1) to poll the gaming machines to obtain the output data generated by the gaming machines over the network (see at least 3:37-4:9, 5:47-60, and 6:50-23),
 - (2) to store said output data in the second database (see at least 6:12-23),
 - (3) to transmit said output data over the network to the first database from the second database and then remove said output data from the second database after said transmission of said output data (see at

least 5:56-60. As described in an Advisory Action mailed 7/19/2007, the claim language is directed toward removing output data from a second database after the transmission of the output data, the output data having been transmitted over a network from the second database to the first database. As was also described in the Advisory Action, such feature is an inherent feature in Pease, at least because Pease's equivalent of a second database (e.g. processor 138) is limited by the size of the processor's data storage. The data stored in the second database must therefore be discarded in order to maintain normal operation and prevent overloading the data storage capacity. Since the data originates in gaming machines, gets transmitted to the second database, and further transmitted to the first database, the data must not be removed from the second database until after the data has been transmitted to the first database. Thus, the removal of output data from the second database after transmission of output data is inherent in Pease.),

(4) to periodically obtain the input data from the first database (see at least 3:37-4:9 and 6:12-23),

(5) to store the periodically obtained input data in the second database (see at least 3:37-4:9 and 6:12-23), and

(6) to transmit at least a portion of the periodically obtained input data required by one of the gaming machines to keep said one gaming

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machine operational from the second database to said one gaming machine without accessing the first database

- (As noted in the previous action, the claimed invention *defines* the periodically obtained input data as data that is periodically obtained from the first database (see e.g., claim 1, step 4) and stored in the second database (see e.g., claim 1, step 5).

Because the 'periodically obtained input data' or 'POID' is categorically obtained from the first database, the first database *must* have a role in providing the POID over the network to the second database. Furthermore, there is no indication in the claimed invention as to whether transmission of POID takes place under command from the central authority or not.

However, in e.g., step 6 of claim 1, the POID is transferred from the second database to a gaming machine *without accessing* the first database. Clearly the first database *must* have been accessed at some point in order to obtain the POID in the first place. Therefore, the Examiner interprets the limitation of e.g., step 6 such that the gaming machine does not obtain the POID from the first database directly, but rather the gaming machine obtains POID from the second database.),

said programmed hardware being configured to perform at least said process without command from the central authority

- (As stated above, the POID *must* come from the first database, so the POID itself is not a *command*, in the scope of the claims. Thus, the claim limitation *without command* must mean that a separate instruction (*command*) from the first database is not required in order to transmit POID from the second database to the gaming machine).

Pease teaches the invention substantially as described above. Pease additionally teaches that player tracking systems are known in the art and may include a card bearing encoded information, wherein the card is purchase by a player and may be linked to an existing account (see at least 3:37-4:9). Pease lacks in explicitly teaching that a ticket is generated at a gaming machine. In a related disclosure, Rowe teaches that as technology in the gaming industry progressed, “the traditional method of dispensing coins or tokens as awards for winning game outcomes [became] supplemented by ticket dispensers which print ticket vouchers that may be exchanged for cash or accepted as credit of indicia in other gaming machines for additional game play. An award ticket system, which allows award ticket vouchers to be dispensed and utilized by other gaming machines, increases the operational efficiency of maintaining a gaming machine and simplifies the player pay out process. An example of an award ticket system is the EZ pay ticket system by International Game Technology of Las Vegas, Nev.” See col. 1, lines 36-47. Rowe further teaches, “An important component of an award ticket system is the ticket validation process. Typically, a game player's satisfaction with an award ticket system is based upon the ease by which the ticket

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vouchers may be validated or utilized within the context of game playing. When the ticket validation process is difficult, a game player may become dissatisfied with the game playing area offering the award ticket system and frequent a game playing area without an award ticket system or a game playing area offering a simpler ticket validation process.” See col. 1, lines 56-65. Finally, Rowe teaches that all of the gaming machines print ticket vouchers, which may be exchanged for cash or accepted as credit of indicia in other gaming machines (2:5-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the system taught by Pease to generate tickets at the gaming machine as taught by Rowe in order to provide increased operational efficiency of maintaining a gaming machine and simplify the player pay out process, thereby increasing player satisfaction as taught by Rowe.

The combined teachings of Pease and Rowe teach the invention substantially as described above, including respective teachings of the use of databases to store relevant gaming data. For instance, Pease suggests an embodiment that additionally employs “dial-up database services and the like or permanent-node internet communications or database service communications” (10:23-35). Furthermore, Rowe teaches that after a ticket voucher is cashed out, “the CVT marks the ticket paid in a database to prevent a ticket voucher with similar information from being cashed multiple times” (2:31-34). While both references teach the use of ‘databases’, neither is specifically termed a ‘relational database.’ In a related disclosure, “What are relational databases?” teaches that relational databases have been “a staple of business

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computing from the very beginning of the digital era,” noting E.F. Codd is credited with the creation of relational databases in 1970 (p. 1). The document teaches that the difference between tab-delimited, or “flat”, databases and relational databases is simply one of tabulation: While the flat database creates “one long text file,” the relational database uses tables to store information. Finally, the document recognizes that relational databases are beneficial in that they use “the relationship of similar data to increase the speed and versatility of the database” (p. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the invention taught by Pease and Rowe to utilize relational databases in order to increase speed and versatility of databases, as is favorably taught by “What are relational databases?”.

Further regarding claim 34, Pease teaches the recited dividing of gaming machines into a first group and a second group at least by the teaching that multiple casinos, each having a group of gaming machines, may communicate in substantially the same way with a respective gateway processor (see at least 1:65-2:19).

Regarding claim 2, Pease teaches a first network between the gaming machines and the second database, and a second network between the second database and the first database (see at least Fig. 1).

Regarding claim 3, Pease teaches a first processor arranged to manage the first database and a second processor arranged to manage the second database (see at least 5:40-41 and 5:61-66).

Regarding claims 5 and 23, Pease teaches gaming machines comprising meters arranged to store meter data and wherein the output data comprises the meter data or jackpot data, wherein the data comprises meter data for gaming machines played within a predetermined preceding time period (see at least 5:56-60, 6:24-7:2, 8:13-18).

Response to Arguments

4. Applicant's arguments filed 1/30/2009 have been fully considered but they are not persuasive.

Applicant contends on pages 11-13 of the Remarks that the prior art does not teach the claimed invention as a whole. Specifically on page 12, Applicant finds that Pease and Rowe do not disclose:

(1) the use of relational first and second databases with tables for storing balance data, ticket data, meter data, jackpot data, output data and player data, (2) periodically transmitting at least a portion of meter data, jackpot data, output ticket data and player data from the second to the first relational database, (3) periodically obtaining input ticket data and balance data from the first relational database, or (4) transmitting at least a portion of input ticket data and balance data to the gaming machines when said portion is required by the gaming machines.

Regarding points (1) and (2), the Examiner has demonstrated in the grounds of rejection above that relational databases have been well known in the art for decades and are ubiquitous in business computing. The differences between relational databases and "flat" databases are well understood in the art and therefore no unpredictable result would be achieved by the use of relational databases in casino environments. Regarding point (3), Pease teaches periodically obtaining data in at least 3:37-4:9 and 6:12-23 by collecting data on a "polling cycle." This feature has been established in previous office actions. Finally, regarding point (4), the combined

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teachings of Pease and Rowe yield a system that transmits at least a portion of input ticket data and balance data to the gaming machines when needed. In Pease, coin-in data and current value of jackpot (or progressive jackpot) data are necessary to the casino system 102, the central system 106, and the gaming machines 108. In Rowe, the ticket data is transmitted between CVTs 60 and 70, gaming machines 65-69 and 75-79, and various centralized devices such as the EZ pay server 10. Therefore, Applicant's argument is not persuasive.

On pages 12-13, Applicant states that certain "properties of the subject matter which are inherent in the subject matter" of the claimed invention, which are purportedly disclosed in the specification are allegedly not recognized in Pease or Rowe. Applicant relies upon a court decision quoting *In re Antonie*, which found that in determining obviousness under 35 U.S.C. 103, the court looked to subject matter "literally recited in the claim in question" and "those properties of the subject matter [that] are inherent in the subject matter *and* disclosed in the specification."

The Examiner respectfully submits that Applicant has misconstrued the findings of the court and has incorrectly applied those findings to the instant application. First, the facts of *In re Antonie* are not sufficiently similar to those of the instant application.

As stated in MPEP 2141.02, the *Antonie* case related to following:

The claimed wastewater treatment device had a tank volume to contractor area of 0.12 gal./sq. ft. The court found the invention as a whole was the ratio of 0.12 and its inherent property that the claimed devices maximized treatment capacity regardless of other variables in the devices. The prior art did not recognize that treatment capacity was a function of the tank volume to contractor ratio, and therefore the parameter optimized was not recognized in the art to be a result-effective variable.

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As is clear from the above citation, the court determined that a particular ratio of tank volume to contractor area was found to be the invention. The ratio was both claimed and disclosed. The prior art had not recognized the inherent property that resulted in a maximized treatment capacity regardless of other variables. This is tantamount to an optimization of ranges, especially those that yield predictable results (“[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)).

Conversely, in the present application, Applicant contends that the purportedly inherent feature not recognized by the prior art is that the invention helps to ensure that the “gaming facility will remain operational even if some of its networks or central authority malfunction” (Remarks, p. 12). Regardless of whether this feature is inherent, it is not claimed, and it is certainly not an unpredictable result. Those of ordinary skill in the art of data communications would recognize if two databases are present (as they are in Pease) and one of those databases malfunctions, it would be *per se* obvious to use the functional database. See also *KSR International Co. v. Teleflex Inc.*

Moreover, it has not been demonstrated by the Applicant that the combined teachings of Pease and Rowe would lack the inherent feature argued above, nor could such an argument be sustained. The court has found that *prima facie* obviousness is not rebutted by merely recognizing additional advantages or latent properties present in the prior art.

Mere recognition of latent properties in the prior art does not render nonobvious an otherwise known invention. *In re Wiseman*, 596 F.2d 1019, 201 USPQ 658 (CCPA 1979) (Claims were directed to grooved carbon disc brakes wherein the grooves were provided to vent steam or vapor during a braking action. A prior art reference taught noncarbon disc brakes which were grooved for the purpose of cooling the faces of the braking members and eliminating dust. The court held the prior art references when combined would overcome the problems of dust and overheating solved by the prior art and would inherently overcome the steam or vapor cause of the problem relied upon for patentability by applicants. Granting a patent on the discovery of an unknown but inherent function (here venting steam or vapor) “would remove from the public that which is in the public domain by virtue of its inclusion in, or obviousness from, the prior art.” 596 F.2d at 1022, 201 USPQ at 661.); *In re Baxter Travenol Labs.*, 952 F.2d 388, 21 USPQ2d 1281 (Fed. Cir. 1991) (Appellant argued that the presence of DEHP as the plasticizer in a blood collection bag unexpectedly suppressed hemolysis and therefore rebutted any *prima facie* showing of obviousness, however the closest prior art utilizing a DEHP plasticized blood collection bag inherently achieved same result, although this fact was unknown in the prior art.).

“The fact that appellant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious.” *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985) (The prior art taught combustion fluid analyzers which used labyrinth heaters to maintain the samples at a uniform

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temperature. Although appellant showed an unexpectedly shorter response time was obtained when a labyrinth heater was employed, the Board held this advantage would flow naturally from following the suggestion of the prior art.). See also *Lantech Inc. v. Kaufman Co. of Ohio Inc.*, 878 F.2d 1446, 12 USPQ2d 1076, 1077 (Fed. Cir. 1989), *cert. denied*, 493 U.S. 1058 (1990) (unpublished — not citable as precedent) (“The recitation of an additional advantage associated with doing what the prior art suggests does not lend patentability to an otherwise unpatentable invention.”).

Furthermore, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Finally, Applicant contends on pages 12-13 that the combination of Pease and Rowe would result in a different invention than the one claimed. The Applicant avers that “it is not the case that the most direct combination of Pease and Rowe would store all of the claimed types of data in a table of a relational database in the gateway processor, or that such combination would periodically transmit all of the claimed types of data to and from the central authority” (p. 13, emphasis omitted). The Examiner notes that each of these teachings has been demonstrated in the above paragraphs of this section. Nevertheless, Applicant continues, “a simpler combination would merely store most data that passes through the gateway processor temporarily in a buffer, rather than a table of a relational database” (p. 13). The Examiner submits that such

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conclusory statements have no basis in the facts of this application or the prior art.

Applicant has simply created a scenario out of thin air where “most,” though apparently not all, data is stored in the gateway processor of Pease. Aside from the fact that Applicant’s proposed scenario goes against teachings of Pease, it has been found that “Attorney argument is not evidence unless it is an admission, in which case, an examiner may use the admission in making a rejection” (MPEP 2145).

In view of the above explanations, the claimed invention is deemed unpatentable over the cited prior art.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. McCulloch whose telephone number is (571) 272-2818. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. H. M./
Examiner, Art Unit 3714
5/26/2009

/Peter D. Vo/
Supervisory Patent Examiner, Art Unit 3714